

Peter M. Steinert, 1945–2003



Peter M. Steinert, Ph.D., Chief of the Laboratory of Skin Biology, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), National Institutes of Health, Bethesda, Maryland, was internationally renowned for his work on intermediate filaments, and structural and molecular biology of the skin. We are saddened by his untimely death on April 7, 2003.

Peter started out as a wool protein chemist but subsequently diversified widely, focusing on the proteins of skin, hair and other epithelia, predominantly keratins. With this diversity, his work impacted the understanding of human skin diseases, notably the ichthyoses, a dimension that he relished. Peter was born in Australia and received his Ph.D. from the University of Adelaide, South Australia. There he worked with Professor George E. Rogers, who describes Peter's early work on keratin filament synthesis: 'It was an exciting time for us and he published four outstanding papers on this work in the early 1970s. In 1973, after further work at Boston University and the Massachusetts Institute of Technology, he joined the Dermatology Branch, National Cancer Institute. In 1990, he started the Laboratory of Skin Biology, NIAMS and was appointed as the first Chief.

Peter's career accomplishments are awesome – given in no small part to his penchant for pushing the (cornified) envelope, and focus on framing the appropriate scientific question to discover the precise answer. His work on the structural biology of the skin includes clarification of keratin intermediate filament structure and assembly, identification of novel corneocyte components, characterization of the enzymes (transglutaminases) involved in their cross linking, and elucidation of the process of cell envelope assembly. Peter initiated the first Gordon Conference on Intermediate Filaments, which is still going strong today. He authored almost 250 articles and book chapters, was a prolific reviewer of papers and grants, presented more than 50 invited international lectures, and held 4 patents, with an additional one pending.

Peter was a member of the editorial boards of several journals including the *Journal of Investigative Dermatology*, which he served from 1992 until the time of his death. He was an active

member of the Society for Investigative Dermatology and a consistent and visible participant in the Annual Meetings. As a frequent presenter and discussant, he was well known for his enjoyment of the intellectual jousting associated with an interactive solution to difficult scientific problems. Peter determined the first complete sequence of a keratin molecule, and his focus was clearly displayed on his car license plate that read "KERATIN". This focus, in conjunction with his pursuit of perfection led The Washington Post to publish his Letter to the Editor castigating the misappropriation of the term "keratin" to describe an insect cytoskeleton. It was "chytin," he wrote.

Peter's science was truly international in scope, as were his collaborative and mentoring relationships. He enjoyed many global excursions, especially to Europe, Asia and Australia. These trips encompassed a variety of activities including working on collaborative projects, lecturing, and serving as an introduction to the many international fellows that he hosted and mentored in his laboratory.

Peter was known for many attributes. He had boundless enthusiasm, a unique sense of humor, a love of life, and a passion for perfection. Perhaps a few quotes read at Peter's funeral service from some of his many international friends and colleagues would begin to convey the complexity of this great scientist. Peter "...kept on challenging us with ever new ideas and findings, and carried us away with his enthusiasm and sense of humor.... He was larger than life." His professional contribution was eloquently summarized by his friend and colleague David Parry, a world renowned structural biologist from New Zealand, "It would be easy to list here the brilliant experimental work that Peter initiated in his lab, the string of postdoctoral fellows whose careers he has shaped, and the admiration he has engendered in the world-wide community of scholars in whose fields he has been the acknowledged master and leader. In my opinion Peter was one of the world's great scientists and someone who was undoubtedly of Nobel Prize status. His loss to the field is immeasurable."

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Dr Steinert was a strong advocate for ichthyosis-related research and supported the important work of the Foundation for Ichthyosis & Related Skin Types, during his life and with a bequest in his will. In honor of Dr Steinert's research advances in the disorders of cornification and substantial bequest, the Foundation has established the Peter Steinert Research Fund. Contributions can be made payable to the "Foundation for Ichthyosis & Related Skin Types" and sent to Jean Pickford, Executive Director, attn: Peter Steinert Research Fund, 650 N. Cannon Avenue, Suite 17, Lansdale, PA 19446. The Foundation's federal tax identification number is 94-2738019.